

sulted my Australian friends about the possibility of continuing my studies in the German cockroach research center at Armidale, N.S.W. They gave us a cordial invitation to come to the University of New England, and here we are with our car, which accompanied us from Naples to Sydney on the liner Galileo Galilei, so appropriately named as a carrier for a scientific mission.

The Department of Zoology here is noted for its research by Professors O'Farrell and Stock on regeneration in the German cockroach, a truly international insect. I have now studied specimens from Blacksburg, Virginia; Vienna, Austria; and Armidale, Australia. My present objective is to complete as quantitatively as I can my description of what happens to the annuli of the antennae of the German cockroach during its development. Variation is inherent in any biological process and it is particularly troublesome in the antennae of this insect, because to normal variation is added that caused by continual mutilation of the antennae by the insects themselves. I shall have to decide on structural specifications for antennae that I think are typical and describe them accordingly. I am continually at the microscope, observing, counting, and measuring parts of many specimens of antennae, but at last, if I survive, will emerge a picture close to the truth and one that has not been seen before, because no one has had sufficient time and interest to work it out.

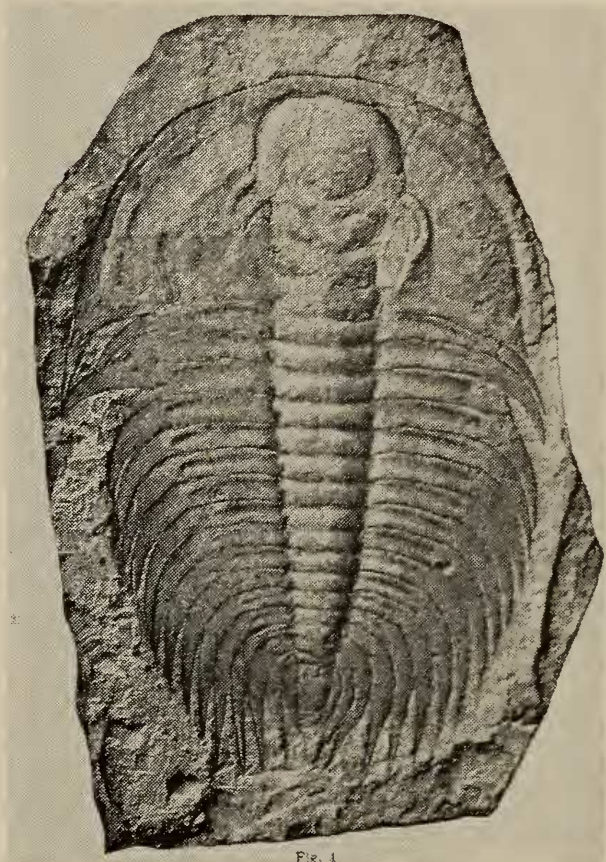
Who wants to see the picture? are not cockroaches repulsive? No, my friend, under a microscope cockroaches are beautiful; you can't go wrong in looking closely at anything you please.



A CONTRIBUTION FROM THE ARCHIVIST

Trilobites from Pennsylvania

In the Cambrian it was, as Edgar Dacqué once said, fashionable to be a Trilobite; it was a widespread form of higher life. Beautifully-preserved specimens were found right in our neighborhood by Atreus Wanner, who named one species in honor of Walcott.



Charles Doolittle Walcott (1850-1927) published an extensive study of "Cambrian Faunas of North America" (1) when he was paleontologist at the Geological Survey, of which he became director in 1894. He was president of the Washington Academy of Sciences in 1903, and presided over the commemorative meeting at which John Wesley Powell was eulogized as a soldier, engineer, and archeologist (2).

Wanner reported about *Olenellus* (*Holmia*) *walcottanus* sp. nov. in the Academy's Proceedings of July 13, 1901 (Vol.

3, pp. 267-272), of which the introduction and one of the plates are reproduced here.

"A New Species of *Olenellus* from the Lower Cambrian of York County, Pennsylvania.

"By Atreus Wanner.

"Reference is made by Mr. Charles D. Walcott, in Bulletin No. 134, United States Geological Survey, to the *Olenellus* fauna of the York county, Pennsylvania, Cambrian. At that time fragmentary impressions of trilobites had been collected, but no locality had yielded specimens that could then be referred with certainty to any described species of *Olenellus*. I have recently found complete specimens of several species, one series illustrating different stages of growth and presenting variable features of *Olenellus thompsoni*. One new species of the sub-genus *Holmia* is beautifully preserved and I take pleasure in naming it after Mr. Walcott in recognition of his work on the Cambrian faunas."

References

(1) C. D. Walcott, U. S. Geol. Survey Bull. 10 (1884), 30 (1886), and 80 (1891) (890 pp). See also C. D. Walcott, "Lower Cambrian Terrane in the Atlantic Province," Proc. Wash. Acad. Sci. 1, 301-339 (1900); "The Cambrian Fauna of India," *ibid*, 7, 231-6 (1905).

(2) Proc. Wash. Acad. Sci. 5, 99-187 (1903) with portrait and catalog of 251 published writings in period 1867-1902.

—Eduard Farber

ELECTION RESULTS ANNOUNCED

Returns from the annual mail ballot of the membership, sent out in mid-December, were tallied on January 5 by a Committee of Tellers consisting of Harry A. Fowells, Norman Bekkedahl, and Samuel B. Detwiler, Jr. The results were reported at the Academy's annual meeting on January 20.

This year's balloting covered the election of officers and managers only; no By-laws changes and no professional society

affiliations were involved. Some 452 ballots were cast, as compared with 440 returns in January 1965, 340 returns in 1964, 278 returns in 1963, and 468 returns in 1962.

The voters chose Heinz Specht of the National Institutes of Health to be president-elect; Richard P. Farrow of the National Canners Association to be secretary; and Richard K. Cook of the National Bureau of Standards to be treasurer. For managers-at-large, Alphonse F. Forziati of the Department of Defense and Mary Louise Robbins of George Washington University were elected for the three-year term 1966-1968, while Edward A. Mason of the University of Maryland was elected to fill the final year (1966) of the position vacated by resignation of Francis Reichelderfer.

The new officers were installed at the close of the annual meeting on January 20. At the same time, John K. Taylor, last year's president-elect, automatically assumed the presidency.

A complete roster of officers, managers, and committee chairmen will be published in an early issue of the Journal.

SCIENCE AND DEVELOPMENT

In our December issue (page 236) we cited figures on the consumption of certain natural resources in the United States, during the period April 1964 to October 1965, that were only a third as large as they should have been. The Geological Survey has corrected the figures, as follows:

199,000,000 short tons of iron ore
2,260,000 short tons of copper
20,744,000 short tons of aluminum ore
1.3 billion short tons of sand and gravel
12,898,000 short tons of sulfur
13.4 billion barrels (oil equivalent) of mineral fuels
27,594,000 short tons of phosphate rock
179 trillion gallons of water